

EPA REGION 10

PERFORMANCE WORK STATEMENT  
FOR  
UNDERGROUND INJECTION CONTROL  
FIELD INSPECTION SUPPORT IN ALASKA

JULY 2019

## 1. BACKGROUND

EPA's Underground Injection Control (UIC) program regulates injection wells, as directed by Part C of the Safe Drinking Water Act (SDWA). The UIC regulations, found at 40 CFR Parts 144-147, define Class I injection wells as those that inject hazardous, radioactive, and other industrial and municipal wastes beneath the lowermost formation containing and underground source of drinking water. Class I wells must demonstrate mechanical integrity prior to injection and on a regular basis thereafter.

SDWA section 1445(B)(i) authorized the EPA Administrator or his/her designated representatives to enter and inspect any facility subject to UIC program requirements. Additionally, 40 CFR Part 144.51(i) specifically authorizes an inspector at permitted facilities at reasonable times, after presentation of identification and other documents as required by law, to:

1. Enter the premises where the activity occurs or required records are kept;
2. Have access to and copy required records;
3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations; and
4. Sample or monitor, to assure compliance or otherwise authorized by the SDWA.

(Note: water quality sampling is not planned within the scope of this contract.)

There are currently 17 EPA UIC Class I non-hazardous permits in EPA Region 10 that authorize approximately 23 Class I injection wells in Alaska. (See Attachment B- Region 10 UIC Class I Permit List for the list of current.) The number of UIC Class I permits and permitted wells that warrant inspections may increase or decrease anytime during the contract period.

## 2. PERFORMANCE OBJECTIVE STATEMENT

The objective of this contract is to help protect the environment and human health by performing field inspections of UIC Class I non-hazardous injection wells associated with oil and gas facilities in Alaska. On behalf of the Environmental Protection Agency (EPA), the Contracting shall plan, witness, document, and report on compliance activities including mechanical integrity tests (MITs).

## 3. TASKS

The Contractor shall supply the necessary personnel, equipment, and supplies, to perform compliance inspections at EPA-permitted Class I non-hazardous industrial waste injection wells located in EPA Region 10. These UIC Class I wells are two regions of Alaska: the North Slope and the Cook Inlet.

**EPA estimates that the Contractor shall conduct approximately 60-100 inspection tests per year on approximately 10-18 separate inspection trips. This estimate may increase or decrease if EPA issues additional UIC Class I permits or cancels existing permits.** The duration of most inspection trips is between 1 and 8 days. During each trip, the Contractor shall support EPA's inspection work at UIC Class I injection wells in Alaska. EPA staff inspectors will accompany the Contractor on most, but not all, inspection trips.

The Contractor shall conduct five general types of inspection activities required by UIC Class I permits. These inspections are described in Table 1. The estimated hours listed are approximate

and may vary due to weather, equipment and operator personnel availability, or other factors. The estimated hours do not include travel, pre-inspection meetings, pre-inspection preparation, or post-inspection reporting.

The Contracting Officer Representative (COR) will monitor all tasks performed under this contract. The COR will provide clarification and technical direction of contract activities.

Field activities in remote regions of Alaska are susceptible to factors that can change or delay inspection timing. These factors include weather, transportation logistics, and personnel or equipment availability. The duration of an inspection trip is dependent upon the scope of required field activities as well as unanticipated operational delays. It often takes a continuous field presence of over a week to complete inspection requirements.

### **Task 1. Complete Required Training**

The Contractor shall complete all training required to meet all federal, state, or local requirements, including but not limited to the EPA UIC Inspector Credential Requirement, North Slope Training Co-operative training, and facility specific orientations and training.

Contractor inspector(s) shall complete all training required to obtain EPA UIC Inspector Credentials by EPA Order 3500.1 and the Training Requirements for UIC Inspectors (see Attachment A) within 60 calendar days from the contract award date. This includes occupational health and safety training, basic inspector training, and program specific training. The due date for this training may be postponed with the approval of the COR. The Contractor shall document all training with forms provided by the COR and submit the completed forms to the COR with training certificates. The Contractor shall request and receive UIC inspector credentials from EPA before conducting inspections unaccompanied by an EPA inspector.

Task deliverables: UIC Inspector credential request package (including initial training documentation), credential-required ongoing training

### **Task 2. Plan Inspections**

The Contractor shall communicate with the COR, other EPA personnel, and/or facility staff to arrange the logistical aspects of each inspection trip. This communication may be conducted via email, telephone, or in person. EPA expects the Contractor, at times, to work autonomously with facility staff during planning activities. The Contractor shall inform the COR or other EPA personnel of all updates to inspection planning no more than seven calendar days after the change is made.

The Contractor shall review materials that are relevant to inspection before the inspection trip. These materials may include but are not limited to: the UIC Class I permit, the inspection test procedures submitted by the Permittee, the well schematic, past inspection test results, and past inspection test notes. The COR will provide these materials.

The Contractor shall inform the COR of all planned inspection trips by submitting an inspection trip schedule. The Contractor shall include in the schedule the planned dates of all inspection tests and travel associated with a specific inspection trip. The Contractor shall submit the inspection trip schedule to the COR by email at least seven calendar days before the first day of travel, unless the trip is planned on short notice.

The Contractor shall attend inspection program planning meetings with EPA personnel in Seattle or in Anchorage. These meetings will take place once every one or two years. The COR will inform the Contractor when an inspection program planning meeting is scheduled.

Task deliverables: Inspection trip itinerary

### **Task 3. Conduct/Support Inspections**

The Contractor shall conduct and/or support field inspections as directed by the COR and in accordance with EPA standard operating procedures (Attachment D). Each inspection will include conducting a pre-inspection meeting, witnessing inspection test(s), and documenting inspection test(s). The COR or other EPA UIC personnel will provide all necessary background information and facility contact information needed to perform the inspections.

#### **Subtask 3.1 Conducting Pre-Inspection Meetings**

The Contractor shall meet with a facility representative as soon as possible upon arriving at a facility and before conducting/supporting any inspection tests. If the Contractor is conducting/supporting multiple inspection tests at a facility during a single inspection trip, the Contractor may conduct one pre-inspection meeting for all the inspection tests. At the meeting, the Contractor shall:

- Present the Contractor's EPA inspection credentials, a completed EPA Notice of Inspection (NOI) to the facility representative, and the U.S. EPA Small Business Resources Information Sheet (EPA-300-B-17-001) to the facility representative.
- Discuss and schedule all planned inspection activities.

The COR will provide the Contractor with all required forms. The Contractor shall document the pre-inspection meeting with notes that include the meeting time, location, attendees, record of credential presentation, and discussion summary. The Contractor shall obtain a scanned copy of the completed NOI form for EPA records.

#### **Subtask 3.2 Witnessing Inspection Tests**

The Contractor shall observe the required inspection tests as directed by the COR. The Contractor shall observe and note whether witnessed inspection tests comply with federal regulations, permit conditions, and planned test procedures. The Contractor shall follow Standard Operating Procedure for Field Operations, Field Inspections and Investigations (Attachment D).

**Table 1. Types of Inspection Tests.**

<p><b>MIT-Pressure Test</b></p>	<p>This test verifies that there is no leakage from the annulus between the tubing, the intermediate casing, the well head, and the packer. This is the most common type of test witnessed by UIC inspectors. Most EPA Region 10 UIC Class I permits require this test annually.</p> <p>To conduct this test, the Permittee brings the annulus to a pressure established in the permit conditions. Witnesses then monitor the pressure in the annulus for at least 30 minutes. Preparing for and conducting this test typically takes 3-6 hours. Also called a Mechanical Integrity Test of the Inner Annulus (MIT-IA).</p> <p>Estimated tests per year: 23*</p>
<p><b>MIT-Log Test (Water Flow Log)</b></p>	<p>This test indicates whether fluids injected through the well enter the approved injection zone or flow along the outside of the well bore to enter formations outside the approved injection zone. Most permits require this test every two years. Typical external mechanical integrity tests include Temperature Logs and Water Flow Logs (WFLs).</p> <p>Preparing for and conducting this test typically takes 9-18 hours, depending on well depth and type of testing equipment.</p> <p>Estimated tests per year: 12*</p>
<p><b>MIT- Log Test (Caliper Log)</b></p>	<p>This test evaluates the inside of the injection tubing for damage and deterioration. Most permits require this test every two years, depending on the pipe material and the type of fluid injected. The most common tubing inspection is the Caliper test.</p> <p>To conduct the Caliper test, the Permittee inserts and retrieves a caliper tool through the length of the injection tubing to detect damage. Preparing for and conducting this test typically takes 4-8 hours, depending on well depth and type of testing equipment.</p> <p>Estimated tests per year: 10*</p>
<p><b>File Review</b></p>	<p>This review examines injection well documentation that the facility staff as required by the permit to maintain onsite. Inspectors review documents during every inspection visit to identify any unauthorized injection. The most common document reviewed is waste manifest forms.</p> <p>Conducting this test can take up to 12 hours, depending on the number of manifests.</p> <p>Estimated tests per year: 23*</p>

<p><b>Well Plugging and Abandonment</b></p>	<p>This test verifies that the plugging and abandonment of a well complies with relevant federal regulations and permit conditions. Inspectors witness multiple tests.</p> <p>During construction and repair of injection wells, inspectors will witness well logging and MITs to verify the well can maintain integrity and does not pose any threat to human health or the environment. This broad category may include cement evaluations, step-rate testing, WFLs, pressure tests, and more, depending on the type of construction or workover.</p> <p>Estimated tests per year: Seldom conducted*</p>
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\*The number of estimated tests per year may increase or decrease if EPA Region 10 issues permits for additional UIC Class I injection wells or cancels existing permits.

### **Subtask 3.3 Documenting Inspection Tests**

The Contractor shall document inspection activities with adequate field notes and, when appropriate, photographs. The Contractor shall document all MITIAs using the approved EPA form. The COR will provide all appropriate forms to the Contractor. The Contractor shall follow Standard Operating Procedure for Field Operations, Field Documentation (Attachment D).

The Contractor shall document compliance with all conditions of the UIC Class I permit, including but not limited to well monitoring equipment maintenance, operation and calibration. The Contractor shall also document any indication that an unauthorized injection has occurred.

### **Task 4. Submit Inspection Reports**

The Contractor shall submit an inspection report describing all inspection activities conducted at a single facility during a single inspection trip. The Contractor shall submit the report to the COR within 30 calendar days of the last day of inspection trip. The Contractor shall follow Standard Operating Procedure for Field Operations, Field Reports (Attachment D). This report shall include:

- Location(s) of facilities inspected
- Pre-inspection meeting documentation (including NOI form)
- Names, titles, and contact information of facility representatives
- Inspection tests documentation
- Photographs and photographic log
- Documents or data collected (including copies of manifests)
- Field notes

The Contractor shall submit the inspection report electronically to the COR in a in PDF and/or MSWord format, as directed by the COR. A template of the inspection report is provided in Attachment C.

Task deliverable: Inspection report

#### 4. DELIVERABLES

The Contractor shall submit the deliverables in accordance with the schedule identified below. All deliverables must be submitted electronically.

**Table 2. Contract Deliverables**

<b>Deliverable</b>	<b>Description</b>	<b>Due Date</b>
UIC Inspector credential request package	Completed request to EPA for issuance of UIC inspector credentials, including initial training documentation. See EPA Order 3500.1 and the Training Requirements for UIC Inspectors (Attachment A).	60 calendar days after contract award date
Credential required ongoing training	Certificates or other documentation confirming the completion of required training. See EPA Order 3500.1 and the Training Requirements for UIC Inspectors (Attachment A).	60 calendar days after contract award date, renewed annually
Inspection trip schedule	Planned dates of all travel and inspection tests.	7 calendar days before the first day of travel
Site Inspection Report	Narrative Report that includes location(s) of facilities inspected; pre-inspection meeting documentation (including NOI form); names, titles, and contact information of facility representatives; inspection tests documentation; photographs and photographic log; documents or data collected (including copies of manifests); and field notes.	30 calendar days after last day of inspection trip

#### 5. SPECIAL CONDITIONS

##### 5.1. Key Personnel Qualifications

Contractor must provide key personnel that satisfy one of the three educational requirements below:

1. High school with 10 years relevant experience
2. Undergraduate degree (BA or BS) with 5 years relevant experience
3. Master's degree with 1 year relevant experience

Only undergraduate and master's degrees in a field related to this work will satisfy this requirement. Fields that are related to this work are those that are related to environmental science, engineering, geology, chemistry or physics. All degrees referenced must be from accredited schools.

Relevant experience is defined as employment in a position that regularly applied knowledge of and familiarity with waste management environmental activities, including application of environmental laws including SDWA, CWA, CAA or RCRA. Preferred experience includes hazardous waste characterization and injection well mechanical integrity testing. Resumes submitted for key personnel must show how the personnel meet these requirements and clearly state the requisite and preferred experience.

## **5.2. Contractor Identification and Credentials**

Contractor personnel shall wear an identification badge when onsite that properly identifies employees as contractor personnel at all times. The Contractor shall not wear gear or clothing bearing company names or logos of the Permittees, such that an observer may mistake the Contractor as a representative of the facility.

The EPA will provide each contract inspector with appropriate credentials. The letter of authorization accompanying the credentials will specify that the contract inspector is authorized to perform site inspections as a contractor to the EPA. Upon arrival at an inspection location, the contract inspector shall identify himself/herself as a contractor to the EPA.

The Contractor shall comply with all internal policies and procedures, training requirements, and background investigation requirements for obtaining EPA credentials.

The Contractor shall use credentials only for authorized and official inspection duties. The Contractor shall not use credentials for any other purpose.

The Contractor shall safeguard credentials by keeping them in a secure location. This includes when presenting credentials at the start of an inspection. Credentials must not be photographed or scanned. The Contractor shall report the loss or theft of the credential to the COR or alternate COR as soon as possible and not later than 72 hours after discovering the credential is missing.

The Contractor shall return credentials upon the request of the COR or the Contracting Officer when the contractor is no longer responsible for conducting EPA inspections.

The Contractor shall adhere to the applicable EPA Confidential Business Information (CBI) regulations such as 40 CFR Part 2 Subpart B and UIC program specific CBI requirements.

## **5.3. Travel**

The Contractor shall travel to remote areas in Alaska to perform the duties required in this contract. EPA will reimburse travel expenses on a cost incurred basis in accordance with the Federal Travel Regulations ([www.gsa.gov/policy-regulations/regulations/federal-travel-regulation-fttr](http://www.gsa.gov/policy-regulations/regulations/federal-travel-regulation-fttr)). EPA will include a ceiling amount in the contract to fund inspection activities, including travel.

EPA will pay for costs associated with travel (airfare, lodging, transportation, mileage,



vehicle rental, per-diem, etc.) under the Contract Line Item Number (CLIN) specified as Other Direct Costs (ODCs). The Contractor shall not charge labor under the Travel Contract Line Item Number.

The Contractor shall provide receipts for all travel related expenses, including transportation and lodging at remote facilities that are managed by the Permittees. The Contractor shall pay the Permittee for services provided during inspections in a manner deemed acceptable by the Permittee and retain a receipt for these payments.

#### **5.4. Conflicts of Interest**

The Contractor shall have no conflicts of interest with owners/operators of EPA Class I permitted UIC wells in Region 10. A personal conflict of interest is defined as a relationship of an employee, subcontract employee, or consultant with an entity that may impair the objectivity of the employee, subcontract employee, or consultant in performing contract requirements.

Companies that have current UIC permits includes:

- ConocoPhillips Alaska, Inc.
- BP Exploration Alaska
- Eni US Operating, Co., Inc.
- Hilcorp Alaska, LLC.
- ExxonMobil Alaska
- Caelus Energy, LLC
- Glacier Oil & Gas Corp. (subsidiaries Savant Alaska, LLC and Cook Inlet Energy, LLC)
- BlueCrest Operating Alaska

The Contractor shall confirm in writing that, to the best of the Contractor's knowledge, there are no organizational conflicts of interest as defined in Federal Acquisition Regulations (FAR) Subpart 9.5. The Contractor shall immediately notify the COR and Contracting Officer as soon as the Contract is aware of any actual or potential conflicts of interest concerning employees, subcontractor employees, or consultants, working on or having access to information regarding the contract.

## 6. QUALITY ASSURANCE SURVEILLANCE PLAN

**Table 3. Quality Assurance Surveillance Plan (QASP)**

<b>Deliverable</b>	<b>Performance Standard</b>	<b>Allowable Deviation</b>	<b>Surveillance Method</b>	<b>Incentive/Disincentive</b>
Task 1- EPA-issued UIC inspector credential	Contractor shall submit copy of EPA issued credential to COR no later than 60 calendar days after contract award date.	None	The COR will track and confirm receipt of submittal.	None
Task 1- Record of completed annual training	Contractor shall submit completed training record to COR no later than 60 days after each anniversary of contract award date.	None	The COR will track and confirm receipt of submittal.	None
Task 2- Inspection trip schedule	Contractor shall submit completed inspection trip schedule to COR at least 7 calendar days prior to first day of inspection trip.	1 occurrence per contract period of delinquent receipt of deliverable.	The COR will track and confirm receipt of submittal to the contractor via email response.  EPA will only approve payment for inspection trips approved in advance by the COR.	None
Task 4- Site inspection report	Contractor shall submit completed inspection reports to COR no later than 30 calendar days after last day of inspection trip.	2 occurrences per contract period of delinquent receipt of deliverable.	The COR will track and confirm receipt of submittal to the contractor via email response. The COR will also review the report to verify that it meets the requirements defined in the PWS.	None

## **7. ATTACHMENTS**

Attachment A- Training Requirements for UIC Inspectors

Attachment B- Region 10 UIC Class I Permit List

Attachment C- Inspection Report Template

Attachment D- Standard Operating Procedure for Field Operations

- Field Documentation
- Field Inspections and Investigations
- Field Reports

## **8. ACRONYMS**

BS	Bachelor of Science
BA	Bachelor of Arts
CAA	Clean Air Act
CBI	Confidential Business Information
CFR	Code of Federal Regulations
CLIN	Contract Line Item Number
COR	Contract Officer's Representative
CWA	Clean Water Act
EPA	Environmental Protection Agency
FAR	Federal Acquisition Regulations
LLC	Limited Liability Company
MIT	Mechanical Integrity Test
MIT-IA	Mechanical Integrity Test of the Inner Annulus
NOI	Notice of Inspection
ODC	Other Direct Cost
PDF	Portable Document Format
PWS	Performance Work Statement

## EPA Region 10 UIC Field Inspection Support in Alaska

QASP	Quality Assurance Surveillance Plan
RCRA	Resource Conservation and Recovery Act
SDWA	Safe Drinking Water Act
UIC	Underground Injection Control
WFL	Water Flow Log

**Attachment A- Training Requirements for UIC Inspectors**

**Attachment B- Region 10 UIC Class I Permit List**

**Table 4. Region 10 UIC Class I Permit List (March 2019).**

<b>Permit</b>	<b># of Wells</b>	<b>Location</b>	<b>Owner/Operator</b>
AK1I001-B	1	Badami Unit, North Slope	Savant Alaska, LLC
AK1I002-B	2	Northstar Unit, North Slope	Hilcorp Alaska, LLC
AK1I003-B	1	Alpine Unit, North Slope	ConocoPhillips, Alaska
AK1I004-B	3	Prudhoe Bay Unit, North Slope	BP Exploration (Alaska) Inc.
AK1I005-B	3	Milne Point Unit, North Slope	Hilcorp Alaska, LLC
AK1I006-B	1	Dolly Varden Platform, Cook Inlet	Hilcorp Alaska, LLC
AK1I007-B	2	West McArthur Unit and Osprey Platform, Cook Inlet	Hilcorp Alaska, LLC
AK1I008-B	3	Prudhoe Bay Unit, North Slope	BP Exploration (Alaska) Inc.
AK1I009-B	1	Oooguruk Unit, North Slope	Eni Petroleum Co., Inc.
AK1I010-B	1	Alpine Unit, North Slope	ConocoPhillips, Alaska
AK1I011-C	2	Nikaichuq Unit, North Slope	Eni Petroleum Co., Inc.
AK1I012-A	1	Tyonek Platform, Cook Inlet	Hilcorp Alaska, LLC
AK1I013-A*	0	Liberty Unit, North Slope	Hilcorp Alaska, LLC
AK1I014-A	1	Beluga Unit, Cook Inlet	Hilcorp Alaska, LLC
AK1I015-A	1	Point Thomson Unit, North Slope	ExxonMobil Alaska
AK1I016-A*	0	Cosmopolitan Unit, North Slope	BlueCrest Energy, Inc.
AK1I017-A*	0	Oooguruk Unit, North Slope	Caelus Energy, LLC

\*Permits issued, but wells have not been constructed.

**Attachment C- Inspection Report Template**

**Attachment D- Standard Operating Procedures for Field Operations**

1. Field Documentation
2. Field Inspections and Investigations
3. Field Reports